

Watts. Members of the latter faculty have joint appointment at UC,LA and take part in the teaching program there; students and faculty from UC,LA take part in projects at the Drew School. Informal relationships extend from UC,LA to many other agencies engaged in community medicine including the Los Angeles County Department of Health Services and some of its hospitals and other units.

Thus UC,LA is participating on many fronts in the movement known as community medicine, to adapt medicine more closely to the needs of communities.

Refer to: Borhani NO, Kraus JF: Community medicine at University of California, Davis, *In Community Medicine in California—A Symposium*. Calif Med 118:85-87, Apr 1973

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THE CONCEPT OF A Department of Community Health in a medical school must be viewed in terms of the total mission of a medical school. Departments of community health should provide opportunities for students to learn about, and participate in, the delivery of health care. These opportunities would provide medical students with an invaluable window to the realities of medical practice that await them as graduating physicians of tomorrow.

In offering a definition of the function and purpose of departments of community health, it is perhaps useful to distinguish community health from public health—both products of traditions that are compatible in principle, but quite divergent in focus. As has become apparent in recent years, the maintenance of health and protection from disease is considered as a guaranteed right

of each individual rather than a privilege. The implementation of programs dealing with maintenance of health and prevention of disease has been vested to the government agencies; national, state, and local. The function of these agencies has evolved and increased over the years to cover an entire spectrum of varied activities dealing with environmental sanitation on one hand and prevention of disease (and sometimes treatment—for example, venereal diseases) on the other. Most recently these agencies have become quite concerned and interested in methods of payment and financial aspects of medical care as well. Community health, on the other hand, is a product of the medical profession's long history of attention to the proper diagnosis and treatment of disease, comprising a complex and interrelated series of interests and activities that has been described as "the medical care delivery system," including the ability to pay for these services. Recent advances in medical technology, however, have promoted changes in the social and demographic composition of the population such as age distribution, increase in urbanization and higher levels of income and educational achievements. These changes, in turn, have created a demand for a special kind of medical care delivery both in scope of delivery and in financing. Also, these changes, along with their dramatic publicity, have caused the emergence of an informed and highly vocal public, concerned with issues that affect its health.

We believe that the medical profession's long-established concern for the individual patient and its recognition of these changes have led to the recently identified set of priorities that in themselves have encouraged the establishment of new departments in schools of medicine, known as departments of community medicine or community health.

A definition of community health, therefore, offers a deliberate formulation of a proposal, broad enough to anticipate insights still to be achieved within the entire philosophy of medical education. This proposal denotes a matrix of concern embracing the ecological, social, and economic aspects of the community. Hence, we consider departments of community health those academic and administrative units in medical schools that can best represent the concept of health as a dynamic, non-static force in the communities. It

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should be emphasized that in the context of this definition, the departments of community health have at their foundation the concept of a unified and comprehensive health delivery system for the entire population in the community and not just the individual. These departments, in our opinion, represent that discipline within the medical school that provides, in total integration with other departments (preclinical and clinical), learning opportunities for medical students in a community setting.

The function of the departments of community health must, then, be interdisciplinary in nature. Since health itself is the result of constantly reacting forces, the occurrence of illness in individuals, and its distribution in the population, can be understood best by careful epidemiological considerations of multiple causes and factors constantly influencing man and his environment. To this extent, therefore, epidemiology is viewed as the scientific discipline basic to community health and is as essential in the medical school curriculum as all the other sciences basic to other branches of medicine.

Purpose, Goals and Objectives at UC,D School of Medicine

The purpose, goals, and objectives of the Department of Community Health at Davis are embodied in the principle that we must concentrate on the organization of health facilities and resources in order to effect economic and efficient community programs of comprehensive health care for all.

Naturally, the Department of Community Health at Davis is committed to a bias favoring preventive rather than strictly remedial medicine. And toward that end we have continued to cultivate a special sense of purpose in addressing our energies to problems amenable to community-wide solution, recognizing that our students should no longer be trained exclusively on the selective and biased sample of diseases they encounter within the confines of the University Medical Center. Rather, we believe, they should be given an opportunity to go out into the community and study problems of health and disease in the "patient's" own surroundings and habitat. From its inception, the UC,D Department of Community Health began its activities on the premise that neither the

department of community health, nor the school of medicine can make its contributions in a vacuum, and that our dream can be nurtured and realized only with complete and unselfish integration of our energies with those of other departments in our school, utilizing fully all recent advances in scientific medicine. We in the Department of Community Health at Davis have committed ourselves to the concept that our society's future physicians must be qualified clinicians, counselors, scientists, and, above all, leaders in the community where they live.

Highlights of Activities of the Department

The activities of the Department of Community Health at the Davis Campus are in teaching, community service, and research.

Our plan for curriculum development, both realized and projected, includes the following elements: (1) an introduction to the concepts and philosophy of community health as early and as intensively as possible; (2) development of the student's clinical experience, relying heavily on a joint effort with other departments of the UC,D School of Medicine; and (3) establishment of effective community laboratories for student participation in both the core and elective curricula.

One of the important concepts introduced by the Department of Community Health in the structure of our school's core curriculum is that the basic principles of epidemiology be taught to medical students as soon in their educational experience as possible. The reason for this is our belief that medicine consists of three essential types of activities—*preclinical sciences* based in the laboratory, *clinical sciences* based in the hospital wards and clinics, and *preventive and social medicine* based in the community. None of these three activities is entirely independent, and our medical school curriculum approaches all three in an integrated and cohesive fashion. Just as physiology, biochemistry and anatomy are considered essential basic science material in the clinical teaching, so is epidemiology necessary for understanding preventive medicine. In addition, it is our belief that familiarity with basic principles in epidemiology provides medical students with the background needed for determination of the direction of medical research and the organization of effective health services in the community. Teaching basic principles in epidemiology does constitute, therefore, the major commitment of the Department of Community Health in the teach-

ing of core curriculum. Our teaching method of epidemiology is not isolated lectures or seminars; it is, rather, a problem-oriented, patient-based and community-centered presentation of issues relevant to the specific material which is being taught under the core curriculum. By using this method of teaching we have found that epidemiology becomes relevant to the total curriculum of the school and elicits active student interest and participation.

Other than core curriculum, the Department of Community Health provides students with the opportunity to select from among many and diverse elective courses. These include advanced courses in epidemiology, environmental health, health care delivery, financing, and, of course, participation in community health programs including the opportunity for participation in programs outside the geographic boundaries of the School of Medicine at Davis.

One of our most rewarding achievements in community service has been the development of a demonstration program to deliver comprehensive health services to seasonal agricultural workers and their families (the Yolo County Migrant Workers Health Program). The program was developed with one specific objective: to demonstrate the feasibility of setting up a model program and, once it became viable, to turn over its administration to the community. This objective was achieved and the program now has become a model for expansion into a multi-county Regional Rural Health Program, administered exclusively by local community leaders. Other examples of community service include participation in planning and organization of comprehensive health programs, regional medical programs, and free clinics.

It is important to note that the degree of involvement of a department of community health in different community service programs depends upon the available resources and manpower and is usually dictated by the pressing issues of the time and place. Therefore, one cannot describe these activities in specific terms. No two communities are alike in their needs for community health programs. Departments of community health should be receptive and responsive to the needs of their communities and consider their active participation in the community services. It has been our experience that involvement in such activities serves not only as an effective instru-

ment in discharging our responsibilities to the community, but also provides us with an excellent vehicle for teaching. Students gain inestimable satisfaction from participation in such community programs.

The setting for research activities of the Department of Community Health must be the community itself. The research activities and programs have been directed into two general areas, epidemiology and projects relating to the diverse problems of health delivery system. The selection of epidemiologic studies, of course, depends upon the expertise, enthusiasm and degree of interest among the faculty of the department but all programs share one common thread of cohesion. The objectives underlying this heavy emphasis on epidemiologic research are obvious. The application of our medical skills to the underlying causation of disease in the community provides the practicing physician with a tool to the understanding of the causation of disease process and, more specifically, the tools to institute preventive programs.

In the Department of Community Health at Davis, we have emphasized two specific forms of epidemiologic inquiry. One rather basic form attempts to define and describe epidemiologic phenomena associated with such community health problems as hypertension, stroke, coronary heart disease, infant sudden death, spinal cord trauma, and injuries from motorcycle collisions. This particular research endeavor concerns itself with the application of basic epidemiologic skills to such complicated and enormous problems as the prevention of coronary heart disease, hypertension and stroke. In these situations, our current activities are focused on research to ascertain the effect of intervention in risk factors contributing to these epidemics. The second field of activity and research in our department involves the problems of health care delivery. We have attempted, through community health surveys, to construct stochastic models, development and testing of evaluation criteria, evaluation of ongoing concepts and advances in health care delivery to broaden our perspective of the understanding of the system of health care delivery, but with a principal focus on the application of epidemiologic skills to this multidimensional, complex issue.